

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 04292947 A

(43) Date of publication of
application: 16. 10 . 92

(51) Int. Cl **B41J 2/045**
B41J 2/055
B41J 2/175
H01L 41/09

(21) Application number: 03058622

(22) Date of filing: 22 . 03 . 91

(71) Applicant: BROTHER IND LTD

(72) Inventor: TAKAHASHI YOSHIKAZU
SUZUKI MASAHICO
YAMAGUCHI MASAKI

(54) LIQUID DROP JETTING DEVICE

(57) Abstract:

PURPOSE: To simplify the structure and lower the cost by a method wherein in a device in which a volume of an ink flow path is changed by a piezoelectric transducer for jetting ink, the ink flow paths are radially disposed on the flat surface of the piezoelectric transducer.

CONSTITUTION: A piezoelectric transducer 1 formed by laminating two disk-form piezoelectric ceramics plates 2, 3 is provided rotatably about a rotation center. Ink flow paths 6 to be filled with ink and side walls 60 are disposed radially about a rotating shaft 30 of the piezoelectric transducer 1. On the periphery of the transducer 1, an orifice plate ring 12 having orifices 10 connecting to the ink flow paths 6 is provided. Under the upper piezoelectric ceramics plate 2, an LSI chip 16 covered with an insulating layer 32 is loaded. The ink flow path 6 has a rectangular cross section which is reduced in width toward

the rotation center 7. On the surface of each of the side walls 60 inside the flow path, an electrode 4 treated to be insulated from ink is provided.

COPYRIGHT: (C)1992,JPO&Japio

